

## AESTHETIC EVALUATION AFTER MASTECTOMY AND IMMEDIATE BREAST RECONSTRUCTION USING THE BCCT.CORE SOFTWARE

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**Aims:** BCCT.core<sup>®</sup> (Breast Cancer Conservative Treatment.cosmetic results) is a software created for objective evaluation of the aesthetic result after BCCT. So far, was only essentially used in this type of surgery. Our purpose was to compare the software performance with a subjective expert evaluation, in patients submitted to mastectomy and immediate breast reconstruction.

**Methods:** After informed consent photographic face and bilateral side-views of 45 patients previously submitted to mastectomy and immediate reconstruction (implant 6[13,3%]; latissimus dorsi (LD) with implant 12[26,7%]; autologous LD 9[20%]; TRAM flap 18[40%]) were captured with a digital camera (follow-up: mean–35; min–9; max–74 months). Images were subjectively evaluated by an expert (face and bilateral lateral views) and objectively evaluated by BCCT.core<sup>®</sup> (face-views only). The aesthetic result was classified by expert and software in excellent, good, fair and poor. Comparison between methods was performed using weighted kappa statistics (wk[0-0,25 – poor; 0,26-0,50 – fair; 0,51-0,75 – moderate; 0,76-1 – good]).

**Results:** Agreement was moderate (wk=0,58) for all cases. Regarding reconstruction groups: implant (wk=0,88), LD with implant (wk=0,71), TRAM (wk=0,47). autologous LD (wk=0,14).

**Conclusions:** BCCT.core<sup>®</sup> performed moderately well and can be a starting point to the development of a tool to objectively evaluate aesthetic results after mastectomy and immediate reconstruction.